1 Introduction

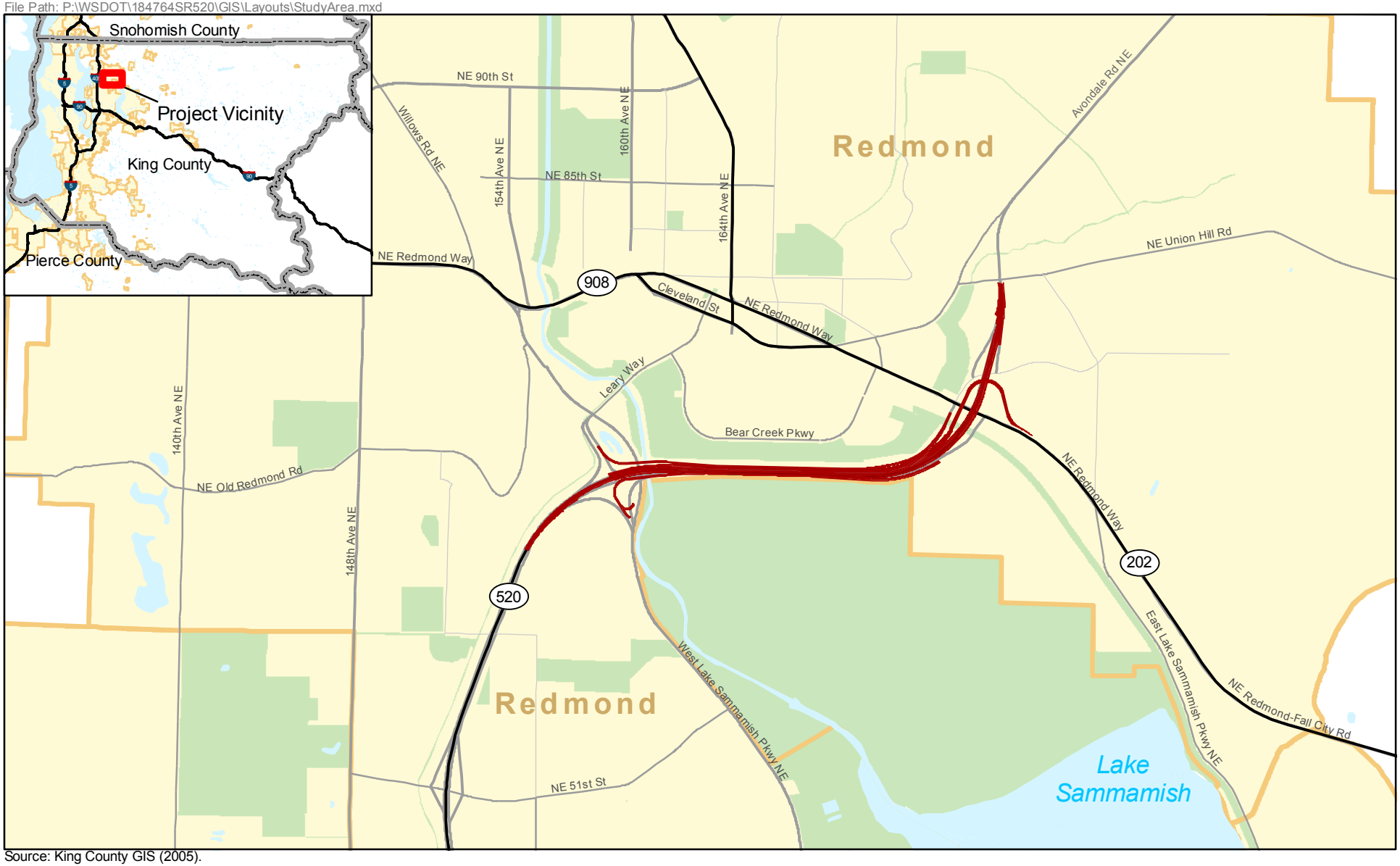
Introduction

The State Route (SR) 520/West Lake Sammamish Parkway to SR 202 Project is the final stage of a three-stage project to enhance vehicular movement and safety along SR 520 through Redmond, Washington (Figure 1-1). A State Environmental Policy Act (SEPA) Final Environmental Impact Statement (EIS) was published in September 1992 (Washington State Department of Transportation [WSDOT], 1992) that analyzed the full project (or ultimate buildout). Financial constraints required that the project be broken into three construction stages. A modified Alternative 3, termed the Preferred Alternative, was selected for construction.

Stages One and Two have been completed. Stage One, completed in 1998, improved the SR 520/ West Lake Sammamish Parkway interchange (including a new bridge over the Sammamish River), added a new interchange at SR 520 and SR 202, and widened the existing lanes and shoulder widths along the mainline. Stage Two, completed in 2002, relocated and enhanced Bear Creek, mitigating wetland impacts from the creek's relocation and the eventual full buildout of the Preferred Alternative, and acquired right-of-way to accommodate both Stage Two and the eventual full buildout of the project. Stage Three—this project—was funded by the 2003 Legislative Transportation Funding Package ("Nickel Funding Package"). Stage Three, which would culminate in the full buildout of the Preferred Alternative selected as a result of the 1992 EIS process, includes the following:

- Widening the mainline from two lanes in each direction to two general purpose lanes and a high-occupancy vehicle (HOV) lane in each direction between the two interchanges. Beyond SR 202 at the east end of the project, the HOV continues in the eastbound direction only (Figure 1-2).
- Constructing an auxiliary lane in each direction between West Lake Sammamish Parkway and SR 202 (see Figure 1-2).
- Constructing two new single-lane bridges to accommodate on- and off-ramps at the West Lake Sammamish Parkway interchange
- Constructing a new flyover on-ramp from northbound SR 202 to westbound SR 520. A new bicycle and pedestrian pathway would be constructed as a separate facility adjacent to the flyover ramp and connecting to NE 76th Street. A widened sidewalk along the local street would connect users to SR 202 for access into Redmond and area trails.
- Constructing water quality wet ponds, water quality wet vaults, and biofiltration swales to treat stormwater prior to discharge into Bear Creek and Sammamish River
- Widening the existing eastbound West Lake Sammamish Parkway, State Route 202, and NE 76th Street bridges to accommodate the project's new lanes

File Path: P:\WSDOT\184764SR520\GIS\Layouts\StudyArea.mxd



Source: King County GIS (2005).

Project Footprint (Edge of Pavement)
Parks
City

N

0 0.25 0.5 Miles

FIGURE 1-1
Vicinity Map
SR520/West Lake Sammamish Parkway to SR 202

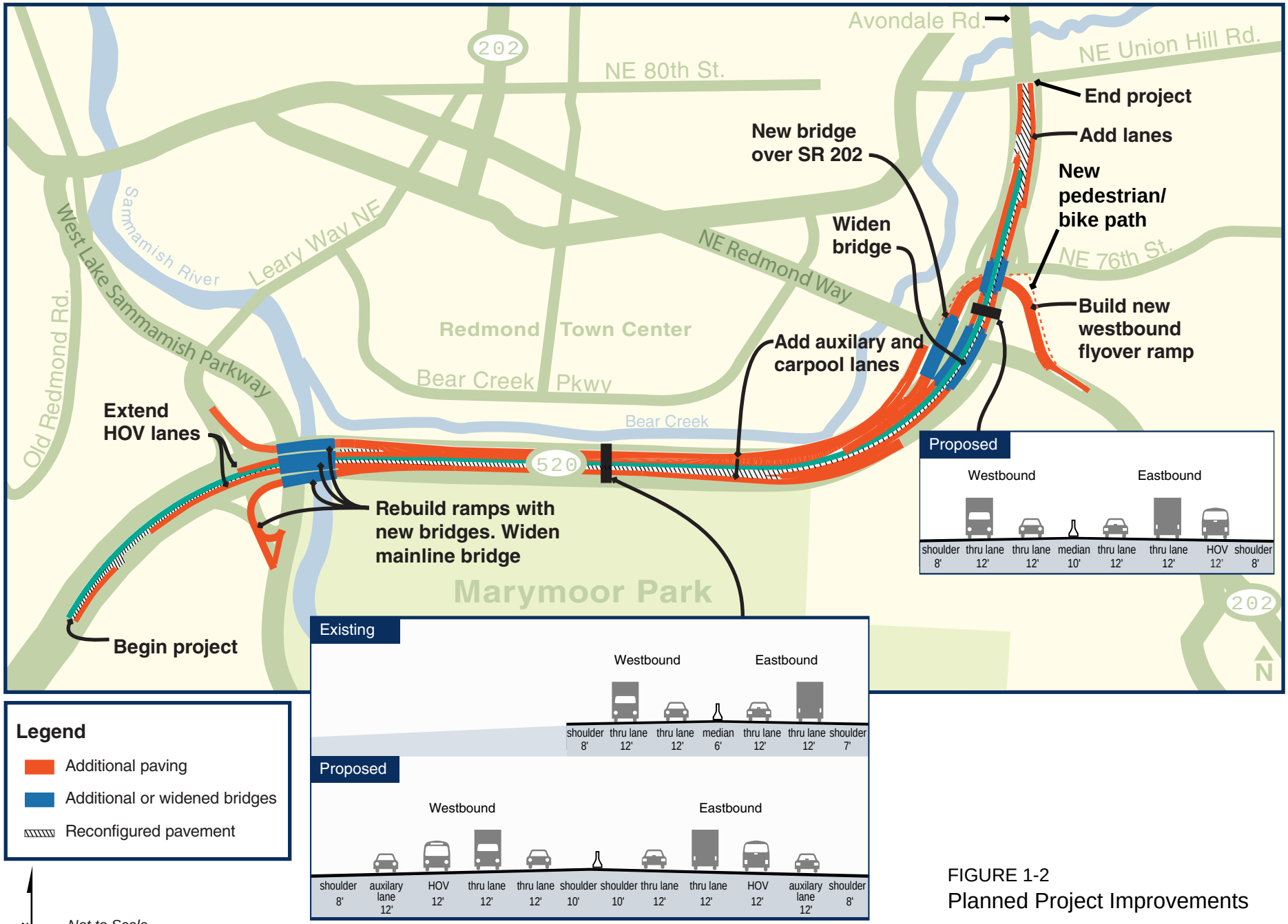


FIGURE 1-2

Planned Project Improvements

SR 520/West Lake Sammamish Parkway to SR 202

This project continues to be needed because continued residential and commercial growth in the area places heavy demands on SR 520. The existing interchanges of SR 520 with West Lake Sammamish Parkway and SR 202 experience congestion, which results in long delays and the increased potential for accidents. The project is designed to add capacity, relieve congestion, and improve safety.

Capacity improvements include auxiliary lanes at the West Lake Sammamish Parkway and SR 202 interchanges along eastbound and westbound SR 520, a northbound-to-westbound flyover ramp from SR 202 to SR 520, and additional HOV lanes in both directions of SR 520 between West Lake Sammamish Parkway and SR 202. The HOV lane continues in the eastbound direction through the SR 520 and SR 202 interchange.

Environmental Documentation

Since the 1992 Final EIS was published, many federal, state, and local regulations that govern project construction and the environment have changed. The immediate area of the project improvements has also changed since 1992 requiring a new examination of the potential effects the project could have to the adjacent built and natural environments. These changes include developing Redmond Town Center, an 120-acre, mixed-use center with mixed-use office buildings, two hotels, a movie theater, and a spring-through-fall farmer's market on the north side of the study area, as well as new commercial and industrial development along SR 202 and on NE 76th Street at the east end of the project. Additionally, the development of several large master-planned communities in the Redmond and Sammamish areas has increased the population traveling through this corridor substantially. The conclusions of the EIS regarding project impacts and mitigation for most of the environment elements therefore, needed to be updated to reflect these changes. Because the project design remains essentially unchanged—and because no significant adverse effects were identified while the project discipline studies were bring prepared—a SEPA Addendum to the original 1992 Final EIS was determined to be the most appropriate environmental document to update project information.

The natural environment elements that have been updated are Geology and Soils, Air Quality, Water Quality, Groundwater, Wetlands, Plants and Animals, and Streams and Fisheries. The built environment elements that have been updated are Noise, Hazardous Waste, Land Use, Recreation, Social, Cultural Resources, Visual Quality, Transportation, and Services and Utilities. These element categories are slightly different than those in the 1992 Final EIS; however, all elements covered in the 1992 Final EIS are covered in this SEPA Addendum except for Energy. WSDOT analysts reviewed the original Energy analysis in the 1992 Final EIS and concluded that the results are still valid.

This SEPA Addendum is organized into three chapters, with supporting documentation provided in appendices. A compact disc is issued with this SEPA Addendum, which includes the discipline studies that are summarized in this document. Where design refinement has led to changes in the effects to the environment, the latest information is reported in the Addendum. This chapter introduces the project and describes the project's purpose and need. Chapter 2 describes the project elements and construction phasing. Chapter 3 includes a review of the findings of the 1992 Final EIS (by environmental element) and an updated discussion of each natural and built environment element listed above. For each element, Chapter 3 discusses changes to the affected environment and the relevant regulations that have occurred since 1992,

as well as any resulting changes in impacts or mitigation. Please note that this document's format is intentionally similar to the 1992 Final EIS so that readers can easily compare both documents.

Purpose and Need

Project Purpose

The project purpose has not changed since the 1992 Final EIS was issued. The following are the project objectives for the SR 520 West Lake Sammamish Parkway to SR 202 Project:

- Improve traffic operations and traffic-carrying capacity to accommodate future traffic volume demands
- Improve the corridor safety
- Minimize the roadway impact upon the natural environment
- Be compatible with the local and regional transportation networks

Project Need

The need for improvements to SR 520 is primarily a result of regional residential and commercial development that has resulted in increased traffic on SR 520 and along other roadways crossing the SR 520 corridor. This growth has resulted in reduced roadway safety, increased traffic congestion, less predictable travel times, and reduced roadway capacity. The need for the improvements associated with this project is consistent with those presented in the 1992 Final EIS.

Transportation Demand and Capacity Needs

Traffic volumes in the study area increased 21 percent overall from 1998 to 2003. The narrow bridge over the Sammamish River and the signalized intersection at SR 202 are limiting factors for traffic capacity within the corridor. Additional local signals to the north and east are also limiting factors. As commercial and industrial development has occurred along SR 520 east of West Lake Sammamish Parkway and along SR 202 and NE 76th Street in the area, the SR 520 corridor has become an important distribution route for these businesses and their customers.

Long delays are encountered by vehicles entering westbound SR 520 from Avondale Road and SR 202 in the AM peak hour. During the PM peak hour, long delays are encountered by vehicles exiting from eastbound SR 520 to SR 202 and Avondale Road. These delays indicate that the existing highway has reached capacity and improvements are still needed. Without major improvements to the SR 520 and SR 202 intersection to respond to current and projected growth trends, delays and congestion in this corridor will continue to increase.

Constructing both HOV and auxiliary lanes along SR 520 between West Lake Sammamish Parkway and SR 202 would alleviate traffic congestion and improve safety. The eastbound HOV lane on SR 520 east of the SR 520 and SR 202 interchange would also improve conditions at the Union Hill Road intersection. Improving transit, carpool, and vanpool reliability, convenience, and safety is vital to reducing study area congestion. A modified interchange at SR 202 would

alleviate some of the delays experienced along SR 520 and SR 202. Improving the West Lake Sammamish Parkway interchange would also help to improve the traffic flow through the area.

Safety Needs

There were approximately 105 vehicular collisions along the SR 520 corridor between West Lake Sammamish Parkway and SR 202 from 2001 through 2003; there were approximately 39 injury accidents along this section of roadway during the same reporting period. There were, however, no fatalities reported.

The most common accident type in the study area was rear-end accidents followed by fixed-object accidents. These types of accidents are attributable to heavy traffic congestion in the study area. The proposed SR 520 HOV and auxiliary lanes, coupled with improvements to the SR 202 interchange, would improve safety in the study area.

System Linkage Needs

SR 520 serves as primary access to the study area from other major transportation facilities, such as Interstate 405 (I-405) and Interstate 5 (I-5). In addition to serving as a main commuter route for nearby residents, SR 520 is the vital main link for those traveling from the north (e.g., Bear Creek and Woodinville) and from the east (e.g., Sammamish and Fall City) to gain access to the urban eastside and Seattle. SR 520 is also a funnel point for east-west traffic at the north end of Lake Sammamish. Proposed improvements would enable more efficient travel between housing and employment centers.

Modal Relationships

Within the study area, improved connections are needed among the regional transportation system, employment, shopping, recreational activity centers, and local communities. Additional infrastructure, such as bridges and HOV lanes, are also needed for improved access and a more efficient transportation system. The existing transportation system within the study area offers no speed advantage to transit, carpools, or vanpools over single-occupant vehicles (SOV). Transportation needs incorporating HOV features—such as immediate ramp metering, HOV and auxiliary lanes, or potential for high-capacity transit—can all be accommodated with the proposed project and would make these options more attractive to area residents.

Public and Agency Involvement

Public involvement for the project began in 2004 with the formation of a Technical Advisory Committee (TAC), comprising representatives of the WSDOT, King County, the City of Redmond, and the City of Sammamish. The TAC met at strategic points during project development to review progress, provide feedback, and identify next steps. The TAC has also provided advice on the project purpose and need statement, issues, and alternatives; helped to refine the project design; and provided project team oversight, including the public involvement process. Other public involvement activities include two public open houses and three newsletters/fliers. Table 1-1 summarizes public involvement activity dates.

TABLE 1-1
Public Involvement Activities

Activity	Date
TAC meeting	January 2004
Web site launch	January 2004
TAC meeting	May 6, 2004
Project flier distribution to 45,000 residents in zip codes 98005, 98052, 98053, 98073, and 98074	June 4, 2004
Distribution of bulk quantities of announcements to libraries, community centers, senior centers, and city halls	
Advertisements in *The Redmond Reporter*, *The Seattle Times*, and *The Sammamish Review*	June 8 and June 21, 2004
Legal notice in *The Seattle Times*	
Press release distribution to *The Seattle Post-Intelligencer*, *The Redmond Reporter*, *The Seattle Times*, and *The Sammamish Review*	June 17, 2004
First open house at Old Redmond Schoolhouse Community Center	June 23, 2004
TAC meeting	September 23, 2004
Newsletter distribution to 45,000 residents in zip codes 98005, 98052, 98053, 98073, and 98074	January 2005
TAC meeting	March 15, 2005
TAC meeting	September 15, 2005
Newsletter distribution to 50,000 residents in zip codes 98005, 98052, 98053, 98073, and 98074	September 19,2005
Advertisements in *The Redmond Reporter*, *The Seattle Times*, *The Sammamish Review*, and the *King County Journal*	Week of September 19 and 26th 2005
Legal notice in *The Seattle Times*	
Press release distribution to *The Seattle Post-Intelligencer*, *The Redmond Reporter*, *The Seattle Times*, and *The Sammamish Review*	October 3, 2005
Second open house at Redmond Regional Library	October 5, 2005

TAC Technical Advisory Committee

A demographic analysis was prepared to inform public outreach efforts for the project. WSDOT has a policy to comply with Title VI of the Civil Rights Act of 1964 in its programs and activities. This act forbids discrimination on the grounds of race, color, sex, national origin, disability, or age and stipulates no one will be denied participation in, be denied benefits of, or otherwise be subjected to discrimination under any program or activity. In order to determine if special outreach efforts were needed to reach protected populations and to assess if project materials needed to be prepared in any foreign languages, the demographic analysis used 2000 U.S. Census information on racial enrollment at local schools and coordinated with the local government and social service providers to inform the outreach efforts. Press releases for the open houses were sent to Spanish, Asian, and African-American media. Flyers were left at

several social service providers in Redmond who serve minorities, disabled, and elderly local area residents.

A Web site (www.wsdot.wa.gov/projects/SR520/WLakeSamPark_SR2021) was launched in January 2004 to provide information to the public and is updated as the project progresses. The Web site provides key contacts for the public's comments and questions, and community members are encouraged to submit comments via the Web site. The Web site will operate until the project is completed and will provide updates on construction progress. This Addendum will be available to citizens on the Web site.

June 2004 Open House

Approximately 60 people attended the June 2004 open house. Comments submitted on comment forms at the open house and via email as a result of the newsletter are summarized below:

- There is support for the project's intersection improvements.
- Widen the study area past Union Hill Road to avoid bottleneck simply moving further east.
- Widen the left-hand turn lane to two lanes at intersection of West Lake Sammamish Parkway and on-ramp to Westbound SR 520.
- Avoid adding to high-traffic volume at Avondale Road.
- Some oppose roadway widening and desire improvements to alternative modes of transportation to address congestion issues.
- Improve location and capacity of HOV lanes.
- Expedite construction timeline to lower costs and quickly alleviate congestion.
- Protect Bear Creek from project impacts.
- Prevent light pollution by using street lights with protective flashing.
- Construct a sound wall to lessen highway noise in neighborhoods.
- Safety for bicyclists and pedestrians should be a top priority.
- Provide for East Lake Sammamish Trail to cross SR 520.

In response to these comments, a grade-separated trail crossing for the new East Lake Sammamish Trail was evaluated, Bear Creek impacts were reexamined and lessened by subsequent design changes, and the decision was made to expedite construction of the flyover ramp from northbound SR 202 to westbound SR 520 ahead of other improvements.

October 2005 Open House

Approximately 50 people attended the October 2005 open house, and many of the comments made at the June 2004 Open House were reiterated. Additional comments are listed below:

- Explain what type of traffic and detours should be expected on Avondale and Redmond Way during flyover ramp construction.

- Address congestion on eastbound SR 520 before constructing flyover ramp.
- Determine whether the flyover will aid congestion at SR 202 and East Lake Sammamish Parkway.
- Add more HOV lanes.
- Accommodate potential plans for high-capacity transit in the region.
- Appreciate efforts to speed up the project schedule to relieve congestion.
- Complete the project in a shorter timeframe.
- Pleased with plans to ease impacts to Bear Creek.
- Do not construct high sound walls, which would block the view along SR 520.
- Prevent the trail connection from crossing lanes due to safety concerns.
- Support the proposed trail connection, which looks feasible and it is better than the original solution.
- Select the milder grade option for the trail connection.
- Make provisions for the East Lake Sammamish Trail to have a 100 percent separated route into Redmond.
- Select either ramp alternative for trail connection rather than the unappealing tunnel alternative.

The project designers have considered these comments and, where possible, incorporated suggestions into the final project design.